

Table 1: Summary of Contaminants & Respective Treatment Techniques in Primer

Contaminant			Treatment Techniques																				
			Enhanced Coagulation & Media Filtration	Enhanced Coagulation & MF/UF	Coagulation & Media Filtration	Direct Filtration	Nanofiltration	Reverse Osmosis	Ion Exchange	GAC	Lime Softening	Activated Alumina	Electrodialysis	Diatomaceous Earth	Disinfection Process Modification	Air Stripping	Oxidation (ozone, KMnO ₄ , Chlorine)	Greensand Filtration	Treatment Technique 1 (Conventional +Cl ₂)	Treatment Technique 2 (Conventional)	Treatment Technique 3 (Cl ₂)		
Class	Category	Specific Contaminant																					
Primary Contaminants	Inorganic	Antimony (Sb)			•			•															
		Arsenic (As)			•			•															
		Asbestos			•	•																	
		Barium (Ba)							•	•						•							
		Beryllium (Be)			•				•	•													
		Chromium (Cr)			•				•	•						• ^s							
		Copper (Cu)			• ⁱ				•	•						•							
		Cyanide (CN)							•	•													•
		Fluoride (F)							•	•						•							
		Lead (Pb)					• ⁱ			•	•					•							
		Mercury (Hg) & Cadmium (Cd)					• ⁱ			•					•								
		Nitrate (NO ₃ ⁻) & Nitrite (NO ₂ ⁻)								•	•												
		Selenium (Se)					• ^s			•						•							
	Thallium (Tl)								•						•								
	Radionuclides	Combined Radium (Ra-226 & Ra-228)							•	•					•								
		Gross Alpha (excluding Ra & U)							• ^p														
		Beta Particle & Photon Radioactivity							•	•													
		Uranium					•			•													
	DBP	Bromate		•	X				X	X			•	X					•				
		Chlorite		•	X				X	X			•	X					•				
HAA (5 species)			•	X				X	X			•	X					•					
THM (total)			•	X				X	X			•	X					•					
Biological	Turbidity (&TSS)																				•		
	Cryptosporidium & Giardia																				•		
	Total Coliforms & Ecoli																				•		
Organic Chemicals	Organic Chemicals (see list in section)											•											
General Water Quality	Alkalinity										•												
	Iron (Fe) & Manganese (Mn)																	•		•			
	Nickel (Ni)								•	•			•										
	TDS								•				•										
	Zinc (Zn)								•	•			•										

p = proposed BAT
s = species dependent
i = appropriate for insoluble form only